

Halbert M. HARRIS

Ames, Iowa, U.S. A.

***Nabidae* ze Stanu Parana.**

(Z wyników naukowych Polskiej Wyprawy Zoologicznej do Brazylii w latach 1921—1924¹⁾).

***Nabidae* from the State of Paraná.**

(From the scientific results of the Polish Zoological Expedition to Brazil in the years 1921—1924¹⁾).

Trough the courtesy of Dr. Tadeusz Jaczewski of the Polish Museum of Zoology the *Nabidae* taken by the Polish Zoological Expedition to Brazil in the years 1921—1924 have been turned over to me for study. This collection, although consisting of only thirty-one specimens, contains two new species and makes available facts which add to our knowledge concerning four other species.

1. *Pagasa aenescens* Stål.

1873. *Pagasa aenescens* Stål, Enum. Hemip., III, p. 108.

1909. *Pagasa aenescens* Reuter et Poppius, Acta Soc. Sci. Fen., XXXVII, № 2, p. 28.

This species is represented by a macropterus female taken at Cará Pintada, (1007 meters elevation), May 31, 1922, on the ground of a „roça“ (plantation).

¹⁾ Tadeusz Jaczewski, The Polish Zoological Expedition to Brazil in the years 1921—1924, Ann. Zool. Mus. Polonici Hist. Nat., Warszawa, IV, pp. 326—351, Tab. 33—35. 1925.

Originally described from Brazil, the species is as yet known only from that country. Stål's type was from the state of Minas Geraës, Reuter and Poppius have recorded it from Espirito Santo, and there are before me specimens from Maranhão. The Paraná specimen shows a few obsolete pale marks that have not been mentioned in previous descriptions.

Head pale testaceous to fulvous above, the paler markings interrupted around ocelli but evident on column. Antennal formula, I:II:III:IV:V::9:5:19:20:20. Pronotum much broader than long (50:37), shiny piceous black, a triangular patch in front paler, somewhat brownish. Hemelytra fuscous to piceous brown, slightly darkened distally, sometimes (the Paraná specimen) with a pale fulvous point on the corium near the middle of the membranal suture; dull, the costal margin (broadly) shiny, this shiny area occupying half the width of the embolium at the region of the fracture and continued slightly beyond the fracture whence it becomes suddenly narrowed and then continues to near apex of cuneus as an extremely fine marginal line. The second rostral segment just attains the anterior acetabula.

2. *Nabis sordidus* Reuter.

1872. *Nabis sordidus* Reuter, Öf. Vet. Akad. Förh., XXIX, № 6, p. 85.
1899. *Nabis sordidus* Champion, Biol. Centr.-Amer., Heter., II, p. 303, Pl. XVIII, figs. 26—28.
1928. *Nabis sordidus* Harris, Entomologica Americana, IX, p. 41, Pl. II, fig. 3.
1930. *Nabis sordidus* Harris, Annals Carnegie Museum, XIX, p. 246.

One brachypterous male taken at Candido de Abreu, August 27, 1922, by sweeping on road-sides. This is the most southerly of the known locality records for this common American species.

3. *Nabis roripes* Stål.

1860. *Nabis roripes* Stål, Rio Janeiro Hemip., p. 70.
1908. *Nabis roripes* Reuter, Mém. Soc. Ent. Belg., XV, pp. 99, 101.
1930. *Nabis roripes* Harris, Ann. Carnegie Museum, XIX, p. 246.

Thirteen specimens, of which five are nymphs, are present from the following localities: Candido de Abreu, August 23, Au-

gust 27, Sept. 4, and Sept. 17, 1922, by sweeping on open, sunny places; Therezina, July 14 and July 24, 1922 by sweeping on road-sides; and Capivary (Rio Paraná, Salto Guayra), January 24, 1923, by sweeping on low plants. The nymphs are recognizable at once from those of *N. sordidus* Reuter by their larger, more prominent eyes and therefore broader head. Of the adults only one is macropterous (female, from Capivary) and only one is a male.

4. *Nabis jaczewskii* n. sp.

Elongate, sordid brownish testaceous, the antennae and legs paler, annulate with fuscous brown; clothed with fine, recumbent silvery hairs. Head sordid brown, the clypeus and the tylus testaceous; dull, a longitudinal naked impressed line on each side of the middle above (diverging anteriorly and giving rise to a transverse bar on vertex near base of eyes) and a longitudinal line on each side of gula shining; longer than broad (26:22), the length of the postocular part equal to the diameter of an eye (6). Eyes prominent, the length of one (10) faintly greater than width of vertex. Ocelli indistinct (absent?). Antennae testaceous, annulate with brownish; proportion of segments, I:II:III:IV::26:42:40:30. Rostrum yellowish testaceous, reaching between intermediate coxae; proportion of segments, II:III:IV:25:25:11.

Pronotum longer than its basal width (28:23); brownish, with a pattern of darker, shiny cicatrices; strongly arched, widest across the middle, the disc with a prominent raised, somewhat conical protuberance on each side near the base; posterior lobe depressed, not longer than the collar. Scutellum small, with a rather prominent, shiny cicatrice on each side at the base. Hemelytra obsoletely developed, represented by small rhomboidal pads that extend slightly beyond the middle of the first abdominal segment. Legs long, pilose, the anterior and intermediate femora armed beneath with many black, granular teeth; the posterior tibiae with a few long, nearly erect hairs in addition to the shorter, more recumbent ones. Abdomen sordid brown, rather thickly clothed with silvery pubescence; provided above and below with denuded shiny areas as in related species. Male

clasper most nearly like that of *N. heidemanni* Reuter but narrower, more strongly curved and with broader, more tapering apex.

Length 6.8 mm; width 1.7 mm.

Holotype, brachypterous male, Foz do Iguassu, Paraná, Brazil, March 19, 1923, by sweeping on low plants on road-sides; in collection of Polish Museum of Zoology. Paratype, brachypterous male, São Domingo (Fazenda Concordia), Paraná, Brazil, February 22, 1922, by sweeping on road-sides, in author's collection.

This species appertains to the subgenus *Hoplistoscelis* Reuter from the other members of which it may readily be separated by the more elongate form, the characters of the pronotum and elytra, and the nature of the male claspers.

It is named in honor of Dr. Tadeusz Jaczewski who in the face of hardship and disaster carried to an end the zoological explorations of Paraná undertaken by the Polish Museum of Natural History (now Polish Museum of Zoology) in 1921-1924.

5. *Nabis capsiformis* Germar.

1837. *Nabis capsiformis* Germar, Silberm. Revue Ent., V, p. 132.

1872. *Nabis kinbergii* Reuter, Öf. Vet. Akad. Förh., XXIX, № 6, p. 90.

1928. *Nabis capsiformis* Harris, Entomologica Americana, IX, pp. 36, 64; Pl. III, fig. 4.

1930. *Nabis capsiformis* Harris, Annals Carnegie Museum, XIX, p. 246.

One female, Marechal Mallet, January 18, 1922, on ferns; a male and female, Capivary (Rio Paraná, Salto Guayra), Feb. 18, 1923, by sweeping on low plants; and a nymph, Candido de Abreu, Sept. 17, 1922, by sweeping on open, sunny places. This is the most wide-spread of all the *Nabidae*, occurring on all the continents and even on many of the more isolated oceanic islands. In the Americas it may occasionally be taken as far north as southern Iowa.

6. *Nabis paranensis* n. sp.

Oblong-oval, brownish testaceous, the antennae, rostrum, and legs paler; the head, pronotum, and hemelytra with a few fine hairs, the abdomen rather thickly clothed with short prostrate silvery sericeous pubescence. Head (measured to basal con-

striction) slightly longer than broad (23 : 19), brownish, a median line (widened anteriorly) darker, the sides behind the eyes and the under surface sordid to fuscous brown. Eyes large and prominent, the length of one equal to width of vertex (8). Ocelli conspicuous. Antennae testaceous, the basal segments paler; proportion of segments, I : II : III : IV :: 20 : 30-34 : 25 : 22. Rostrum pale testaceous, segment I darker; formula, II : III : IV :: 20 : 17 : 10.

Pronotum with median longitudinal line, and cicatrices on anterior lobe fuscous brown. Scutellum black with a yellowish spot on each side at the base, the area between these spots conspicuously depressed. Hemelytra more or less indistinctly and irregularly maculate with sordid brown. Legs pilose, pale testaceous, the femora and tibiae speckled with brown, the apex of the claws piceous black. Abdomen above and a broad stripe on each side of body beneath sordid brown; the connexivum paler with the basal angles of its segments maculate with fuscous. Male clasper quite similar to that of *Nabis punctipennis* Blanchard but larger and broader and angularly widened on the blade before its base.

Brachypterous form. Pronotum broadest at the base, as broad as long (28), the anterior lobe nearly level, only slightly raised above posterior lobe, the latter nearly flat, one-half longer than the collar. Hemelytra reaching to base of fifth abdominal segment, broadly rounded at the apex, the commissure as long as scutellum (10); membrane small, triangular, not extending behind apex of corium.

Length 5.2—6 mm; width 1.7—2.1 mm.

Macropterous form. Pronotum one-sixth broader than long (35 : 30), the posterior lobe somewhat transversely arched, distinctly raised above anterior lobe and subequal to it in length (12). Hemelytra extending well beyond apex of abdomen, the sides feebly curved, exposing the margins of the connexivum from the middle of the abdomen backwards, the commissure much longer than the scutellum (20 : 14); membrane smoky, the nervures fuscous.

Length 6.8 mm; width 1.8 mm.

Holotype, brachypterous male, Bacachery, Dec. 23, 1923, among grass, and allotype, brachypterous female, Marechal Mallet (São Pedro de Mallet), January 19, 1922, by sweeping

on ferns; in collection of Polish Museum of Zoology. Paratypes, one male taken with the holotype, one male and two females taken with the allotype, and one male, Rio Claro, Serra da Esperança, Feb. 4, 1922, by sweeping on low plants. Morphotype, macropterous female, Rio Claro, Serra da Esperança, Feb. 4, 1922. Paratypes in collections of Polish Museum and the author.

N. paranensis is closely related to *N. punctipennis* Blanchard but may be readily recognized by its longer antennae and legs and by the characters of the male clasper. Superficially it has the facies of an *Hoplistoscelis* but is entirely without the femoral armature characteristic of that subgenus.

In addition to the above mentioned specimens there is also in the collection a fourth (?) instar nymph of this species, from Bacachery, Dec. 23, 1923. This specimen is colored as are the adults, the legs being strongly speckled. The first antennal segment has at its middle, as seen from above, a distinct fuscous point from which arises a short erect seta. (This is present in the adult, but is less conspicuous). The antennal formula is, 18:26:25:IV absent. The width of the head is 18. The wing pads reach to the third segment of the abdomen. The anterior femora are armed beneath on their posterior surfaces with a row of five (?) rigid seta-like spines which arise from piceous raised points. This character reminds one of the similar condition found in the adults of some of the *Lasiomeri* and perhaps betrays the origin of the group.

7. *Nabis* sp.

A single specimen of a sixth species of *Nabis* is represented by a (fifth instar?) nymph from Rio Ivahy, Salto de Ubã, Nov. 15, 1922, among grass. This specimen is very elongate, its body dark reddish to piceous brown, and the antennae and legs are clear testaceous and without distinct evidence of darker markings. The legs are very long and are thickly clothed with long erect hairs. Antennal proportions, 24:31:30:26. Head through eyes, 14. Wing pads just reaching on to abdomen.

Length 4.8 mm; width 1.1 mm.

This species belongs to the subgenus *Lasiomerus* Reuter, and may prove to be *N. seticrus* Harris.

STRESZCZENIE.

W materiale z rodziny *Nabidae*, zebrany w Paranie przez Polską Wyprawę Zoologiczną do Brazylii, wyróżnił autor 7 gatunków, w tem 2 nowe, a mianowicie: *Pagasa aenescens* Stål, *Nabis sordidus* Reuter, *Nabis roripes* Stål, *Nabis jaczewskii* n. sp., *Nabis capsiformis* Germar, *Nabis paranensis* n. sp., oraz nimfę należącą przypuszczalnie do gatunku *Nabis seticrus* Harris.
